Computer Science Professor Developing Weather Sensor for Cars

Weather readings may be coming from our own cars pretty soon thanks to the work of a Millersville University professor and his students. Dr. Gary Zoppetti, a computer science professor, and Albert Peterlin, president of the environmental consulting firm Errex Inc., have been working together since mid-July to develop a weather sensory device that could be in every car on the market in just a few years.

Millersville students have been involved since the beginning of the project, helping with the construction and programming of a vehicle interface. Two computer science students are currently working with Zoppetti, one of whom is receiving credit for an independent study.

Peterlin thought of the idea while working for the National Weather Service and was the chief meteorologist for the U.S. Department of Agriculture. The U.S. Department of Transportation has actually been interested in gathering weather and other information from cars for years.

“When I read of the Department of Transportation weather project, I thought getting weather from vehicles made sense and that I could start gathering data even before the government was ready to release their finding,” said Peterlin.

“We began by studying the on-board diagnostics (OBD) system and its communication protocol. At first we used an inexpensive OBD-II scanner to obtain data like RPMs and vehicle speed, which are accessible using standard modes and parameter IDs (PIDs),” said Zoppetti. From there they could easily find barometric pressure. OBD is used primarily by automotive technicians to diagnose vehicle performance issues, but it can also be used to obtain useful real-time data.

“We soon found we needed more flexibility to obtain data without standardized modes and PIDs, such as wiper status (on/off and speed). We built our own programmable vehicle interface (VI), which plugs into the OBD-II port. We are now writing software to obtain wiper status, temperature, headlight status and other information relevant to weather conditions.”
Meanwhile, there have been some obstacles along the way with the prototype device. “The challenges are massive, but opportunity is greater,” said Peterlin. “[T]o be commercially viable we will have to work with every car model, make-by-make, year-by-year. Eventually there will be a suite of environmental standards all vehicle manufacturers will meet, but until then, it is individual work.”

Zoppetti welcomes student help on the project. If interested, you can reach him by email at gary.zoppetti@millersville.edu.

Honorary Degree Recipients for Fall 2013 Announced

Dr. Francine G. McNairy and Roy B. Clair Jr. will receive honorary doctorate degrees from Millersville University at the fall commencement ceremony on December 15, at 2 p.m., in Pucillo Gymnasium.

McNairy, Millersville’s 13th President, served from March 2003 until January 2013. She formerly served as provost and vice president for academic affairs at Millersville since August of 1994. During her tenure at Millersville, she pushed for an increase in the diversity of the faculty and the student body and secured greater relations with government, business and opinion leaders. As University president, McNairy held a $100 million budget and served as supervisor to about 1,000 employees and more than 8,000 undergraduate and graduate students.

Clair ’67, while a junior at Millersville in 1966, co-founded Clair Brothers with his brother, Gene Clair. The company originated from humble beginnings, with the Clair brothers working out of their garage, experimenting with sound. One of their first clients was Franklin & Marshall College. Since then, they’ve provided professional sound reinforcement for celebrity clients such as The Rolling Stones, Bon Jovi, Paul McCartney and Elton John. Their business has blossomed into the world’s largest sound reinforcement company, now called Clair Global. Roy Clair also devoted his time serving as mayor of Lititz, on the board of directors of Linden Hall, on the MU Council of Trustees and was instrumental in establishing the new Lititz Rec Center.

As an academic institution, Millersville grants honorary doctoral degrees to individuals of exceptional accomplishments who have shown remarkable creativity, leadership, service or scholarship. This year’s recipients are receiving their degrees based upon those achievements.
In search of the perfect Christmas tree for your family? What’s the Cadillac of Christmas trees? If you want a soft-needled tree, do you have to sacrifice fragrance? And what is a Concolor? You can get the answers thanks to the new “Doug Fir Christmas Tree Guide” app — available free for your Android phone.

“There isn’t another app like this,” said Dr. Christopher Hardy, a biology professor at Millersville University. “I designed this systematic guide to answer the questions I had about Christmas trees. Doug Fir will help people identify trees and learn a bit about them at the same time—all from the ease of their phone.”

Hardy designed the app with Millersville computer science student, Joe Marks, who graduated in May.

“The top 10 trees we cover make up 99 percent of all Christmas trees sold,” said Hardy. These include: Concolor (white fir), Fraser fir, Douglas fir, Scotch pine, white pine, Colorado blue spruce, Norway spruce, Arizona cypress (ice-cedar), Leyland cypress and red-cedar.

“A blue spruce may look impressive in a great room,” said Hardy, “but its sharp needles can draw blood and wouldn’t be great in close quarters with kids. A Concolor (White Fir) is an up-and-coming tree that is both soft and very fragrant. It has the blue-silvery look of the spruce without the spruce’s prickly needles.”

Some fun facts from the Doug Fir app:

- The white fir is the natural host to the “fir mistletoe,” which is a parasitic plant.
- The pines—Scotch and white—while soft, are not as fragrant as the firs.
- The conical shape of Christmas trees is an adaptation designed to shed snow and ice in the winter.
- The wonderfully scented resin of Christmas trees is also the source of the industrial solvent turpentine and the rosin used to create friction on bows for string instruments, and it improves the grip of gymnasts, bowlers and baseball pitchers.
The sticky resin protects the trees from insect and fungal attacks.

The berry-like cones of the common juniper, a close relative of red-cedar Christmas trees, are used to flavor gin.

The Fraser fir is considered the Cadillac because of its great looks/smell and needle retention.

And, coming soon is the Doug Fir app for iPhones.

New Major Offers Students Flexibility, Better Options for their Future

Millersville University has entered a new era of study and learning. The University now offers an innovative undergraduate major in multidisciplinary studies (MDST), a program of study that permits students, under close faculty supervision, to customize their major. Within a structured curriculum, the MDST major is centered in the arts and sciences and includes 39 credit hours of interdepartmental study and a capstone experience. It is one of only a few similar programs in Pennsylvania.

“Usually drawn from two or more departments or areas of knowledge, this program will have broad appeal to students seeking specialized skills or core competencies that will prepare them for career placement or graduate study,” explained Dr. Dennis Downey, coordinator of the MDST. “The MDST major encourages cross-disciplinary inquiry and collaboration, combined with the practical knowledge and skills needed to succeed in diverse professional fields.”

Current student Danielle Difilippo is entering the new major. “I am interested in the program primarily because it allows me to take classes that I am interested in and will increase my knowledge in certain areas that will help me out in the future,” said Difilippo. “I want to work with children and be a coach, so this lets me set up two cores that involve wellness & sport sciences and child development classes. In the job market, I would be able to use this in many ways. It will allow me to apply for a variety of jobs because I have a major that covers many interests.”

Dr. Vilas Prabhu, provost and vice president of academic affairs, who
Exchange

November 21, 2013

was instrumental in shepherding the new major through approvals said, “This new major allows us flexibility that we never had before. It meets the needs of our individual students as well as corporate and community needs.”

Parth Patel is another student interested in the new major who is designing a program around student affairs. “Because this degree allows for a flexible curriculum, the student gets to decide what he/she wants to make their focus area. This is where the MDST degree separates itself from all other degrees. Students get to create their dreams through this major and have the support of an accredited and well regarded university.”

Proposals may be initiated in two ways: by students working in close collaboration with the program coordinator and faculty advisors, or by groups of faculty interested in exploring novel areas of study beyond the traditional departments. All students in the major earn a Bachelor of Arts degree.

Two concentrations in the new major have already gone through a review process and been “Applied Disability Studies brings to us not only opportunities to teach and learn but engagement in diverse communities,” said Dr. Thomas Neuville, who helped develop the disability studies concentration. “The combination of academic traditions of learning and research acting in concert with voices and practice for social change has a richness to be appreciated for years to come.”

“The concentration in Environmental Hazards and Emergency Management provides an opportunity for students interested in pursuing careers in emergency management and related fields to complete a focused academic program that includes the critical applied experiences,” said Dr. Sepi Yalda, director of the Center for Disaster Research and Education. “Careers in emergency management have been included on the lists of the best 50 careers, and the Bureau of Labor Statistics shows employment to grow by 22 percent by 2018, which is a significant growth compared with many other fields.”

Students and faculty interested in the new major should contact Downey at Dennis.Downey@millersville.edu or 872-3924.
Millersville University is Getting Greener

There’s a lot going on with sustainability on Millersville’s campus. A new garden, TerraCycling program and a new chair for the Millersville University Sustainability Committee, Dr. Nadine Garner, associate professor of psychology, are all part of the University’s efforts to continue sustainability on campus.

As chair, Garner, who is the founder and director for the Center for Sustainability, will prepare and monitor a climate action plan for the University, develop and sponsor educational programs, regularly alert the campus of the progress and develop subcommittees to fill the mission of the committee.

Garner and the Center for Sustainability also actively participate in TerraCycle, a program that pays $.01 to $10 for garbage items. TerraCycle helps pay for surgeries for children with cleft lips and cleft palates through a nonprofit organization called Smile Train.

According to Garner, TerraCycle is an international company that recycles things like toothbrushes, toothpaste tubes, shampoo bottles and old flip flops that are not normally part of a municipal recycling stream. To learn more about the TerraCycle program, watch Millersville’s brief video.

“What we do here at MU, we do under the slogan ‘It takes a village to save a child,’ because the residence halls have been collecting a tremendous amount of garbage,” said Garner. “I tell them I don’t want your money, I don’t want your time, just give me your garbage. I know the college students are short on the first two.”

To kick off the launch of the ’Ville-age Garden, an organic vegetable, herb and flower garden, Millersville’s Center for Sustainability recently hosted a ribbon cutting ceremony and harvest lunch on October 24.

“The ’Ville-age Garden will help continue our reputation as one of the top ‘green’ colleges in the United States,” said Garner. Millersville, along with other universities across the country, earned a spot back in May in the Princeton Review’s Guide to 322 Green Colleges for its sustainability efforts and environmental projects.

The garden, located behind the Huntingdon House, was developed by the Millersville University community and Garner, who is also director of the Center for Sustainability. Students will have
the opportunity to grow their own organic produce, and a portion of it will be donated to the campus food bank in the spring.

The center has also created a partner garden at Wheatland Middle School. The permaculture garden brings Millersville University garden mentors to the School District of Lancaster to teach children how to grow their own food.

For more information on the ’Ville-age Garden visit Millersville’s Center for sustainability.

Millersville University’s National Broadcasting Society Brings Home Awards

Several students from Millersville University brought home first place awards for their audio and video productions presented at the recent National Broadcasting Society (NBS) Freedom States regional video competition.

On November 9, Millersville’s NBS AERho Chapter hosted four different colleges and universities who submitted 60 production entries in 20 different audio and video categories at the NBS Freedom States regional video competition. In addition, more than 20 alumni from Millersville’s communications & theatre department served as judges for the competition and 34 Millersville students received awards in the competition.

Amanda Conroy received the first place award in the Video News Package category for her coverage of the new resident hall complex under construction at Millersville. Conroy and John Coleman also won in the Video News Program category for their news program, “MUTV 99 News,” which they co-produce. Sports anchors Jean Casimir, Ryan Rimby and Kris Thomas won in the Sports Play-by-Play category for their coverage of the Millersville football team. Casimir, Thomas and Mason Perricone won in the Sports Program category for their MUTV 99 sports program, “In the Zone.”
Millersville Women’s Rugby Advances to National Championship

The Millersville University women’s rugby team has attracted considerable attention recently by advancing to the National Small College Rugby Organization (NSCRO) Semifinals for the first time since the club was started.

The top four teams will compete in the NSCRO semifinals. This includes the Millersville ladies in a match against defending-champion Wayne State on Nov. 23 at 12:15 p.m. in Cherry Hill, N.J.

After handing division rival Bloomsburg a loss in the Pennsylvania State Athletics Conference championship game, the women set their sights on the Mid-Atlantic Regional Championship. Held at Swarthmore University Nov. 9-10, the ladies defeated both Sacred Heart University, beating them 22-5, and the previously undefeated Kenyon College by a lopsided score of 40-5, claiming the Mid-Atlantic Regional Championship victory.

“We’ll have to beat the defending champs to advance, but we watched some footage of how they play, and it isn’t going to be impossible,” said sophomore forward Meg Andrews. “These girls [Millersville] are thirsty for a win.”

If all goes according to plan for the Marauders, the national championship game will be played between the ’Ville women and the winner of the other semifinal game between Smith College and Roger Williams University on Nov 24. at 1 p.m.

The games will be live streamed over the Internet via the NSCRO website.

Need to Know
To: Faculty and Staff  
From: Office of Human Resources  
Date: November 19, 2013  
Re: Deferred Compensation Appointments

Diana Morse from Great West Retirement Services will be on campus and available for individual consultations on the dates and times below:

Tuesday, November 26 from 10 a.m. to 2:30 p.m. in Dilworth, Room 110

Thursday, December 19 from 10 a.m. to 3 p.m. in Dilworth, Room 204

Morse can help you learn more about the Deferred Compensation Plan or help you with questions about your account. To schedule an appointment, please e-mail Diana at diana.morse@retirementpartner.com. Further details on the Deferred Compensation Plan can be found at the Commonwealth of Pennsylvania Deferred Compensation Program website.

Please remember to consult with your supervisor when scheduling your appointment time. If you have any questions regarding this announcement, please contact the Office of Human Resources at extension 3017.

11/21/13 Activities

Here are the faculty and staff activities for November 21, 2013.
Faculty and Staff Activities

Millersville Field Hockey Coach Named PSAC Coach of the Year

Shelly Behrens, head coach of the Millersville University Field Hockey Team, has been named Coach of the Year by the Pennsylvania State Athletics Conference (PSAC) for the second year in a row.

“It is humbling, really, to be named Coach of the Year for the second year in a row,” said Behrens, who learned about the recognition through Twitter. “We have some of the best, if not the best, field hockey coaches in the PSAC. To me it is really a reflection of our assistant coaches’ work as well as our team—this belongs to them.”

Behrens, her assistant coaches and her team are also celebrating their win against Shippensburg University for the PSAC Championship. This is their first time winning the Championships since 1986. “I felt immense joy in watching the players beat such a great opponent,” she said. “The support from Millersville and the other athletics coaches and teams has been great as well. I cannot thank everyone enough.”

A few Millersville field hockey players were also recognized by PSAC for their athletic performances. Senior Champayne Hess and juniors Sarah Bomberger, Rachel Dickinson and Lauren Sotzin were named All-PSAC First Team honorees. Senior Brittany Troutman was named an All-PSAC Third Team honoree. Freshman player Ariana Gray was named the 2013 PSAC Freshman of the Year.

Field Hockey Hits the Beach

Millersville field hockey is now just two wins away from the ultimate prize. Sarah Bomberger's goal in the 24th minute was all the Marauders needed to defeat West Chester 1-0 in the November 16 NCAA Division II Quarterfinal hosted at Chryst Field, Biemesderfer Stadium.

The Marauders improved to 19-2 on the season, 9-0 at home, and extended its shutout streak on its home turf to 477 minutes—a span of six games. Millersville entered the 2013 season 0-8 all-time against West Chester but won all four meetings this season including two in the last week. The Marauders, the No. 2 seed in the South Region, now advance to play top-seeded Shippensburg in the NCAA Semifinals in Virginia Beach, Va., on Nov. 23.
Dr. E. Elliott Seda, educational foundations, presented a paper titled “The 7 Habits of Highly Effective Star Teachers” at the 6th annual Lancaster Education Forum at HACC-Lancaster on October 26. The event was part of an annual forum organized by the Adelante Lancaster Latino Education Committee, of which Seda is chair of the professional development sub-committee. Seda also presented a paper titled “Online Multicultural Courses: Perpetuating Invisibility,” at the 23rd annual International Conference of the National Association for Multicultural Education on November 8, in Oakland, Calif.

Congratulations to:

Stephen Peurifoy, Office of the Dean for Science & Mathematics, who was married to Eileen D. Edwards, on November 1 in Millersville.

Who Makes Millersville Special

This edition of Who Makes Millersville Special features Robert Spicer ’00, assistant professor of communications/theatre.

Q: Where did you go to college? What did you major in?

A: I did my bachelor’s degree in speech communication at Millersville University and my master’s degree in broadcasting, telecommunications and mass media at Temple University. I am currently completing my Ph.D. in media studies at Rutgers University.

Q: What inspired you to study communications?
A: When I started my undergraduate education, I was an art education major. One semester in my sophomore year I took my first art education course and found I really did not enjoy it. At the same time I was taking Introduction to Communicology with Dr. Isaac Catt and loved the course. I talked to Dr. Catt about switching my major to communications. I found communication theory fascinating in that first class. Even though I was in the broadcasting option, I chose to go to grad school because I found I was more interested in research and teaching than working in television or radio.

Q: What is your past experience as a professor?

A: I started as an adjunct professor at Millersville University 10 years ago. I was teaching here as well as Ursinus College, York College and DeSales University. After doing that for six years, I applied for a tenure track position at DeSales, where I taught for four years until I applied for the appointment here at Millersville.

Q: What do you enjoy most about being a professor?

A: I love ideas, and I love when an idea clicks for a student. There is something very satisfying for me when I have a great discussion in a class about some idea that gets a great reception from the class. I also love when a student is excited about a project, and I get to hear about their work. Then seeing that student succeed, that’s the best part for me. I had a few students present research papers at a pop culture conference last year. One of them won the “Best Undergraduate Paper” award for that conference. Seeing my student win an award for a paper she wrote for my class made me happier than winning an award myself.

Q: How did you first come to Millersville University?

A: I was a student at Millersville as an undergraduate, and I had a wonderful experience here. I learned so much, I had great professors and I really liked the idea of coming back and becoming a colleague and continuing to be a part of this program.

Q: What do you love the most about Millersville?

A: I have been a part of this campus since 1996 when I was a student. I just like it here. I’m not sure I can point to one thing I love about it, I just love being here.

Q: What classes do you teach at Millersville?

A: Right now I am teaching Communication Research Methods, Communication Theory and Introduction to Audio/Video. In the past I have taught a wide variety of courses, including Introduction to Mass Communication, Media Law, Radio Production, Pop Culture, Journalism and Persuasion.
Q: What is your favorite class to teach?

A: My favorite class to teach is either Introduction to Mass Communication or Media Law. I really love law; a large part of my dissertation is about court cases dealing with free speech issues. I find the course to be challenging, and it’s a lot of work, but it is very rewarding and makes for interesting discussion.

Q: You are the new advisor for Communication Studies students. What are you looking forward to the most about this position?

A: I’m really looking forward to meeting a new group of students. I think it’s going to be fun for me to get to know them and learn about their goals and what they want to get out of their education at Millersville.

Q: Along with teaching, you’ve also done research and written publications on political media and pop culture. Why are you so interested in those topics?

A: I’ve always been interested in politics. I was just a kid during the 1988 presidential election, but I paid attention to it and knew the candidates. I remember sitting up and watching the election results on television during the 1992 presidential election, as well. When I was a kid I loved social studies and government classes. So I think there has always been an interest there for me. I’m not sure where it comes from, but I’ve always loved politics.

Q: What was your favorite research publication to work on? Why?

A: My favorite publication so far is coming out later this year in the Jefferson Journal of Science and Humanities. It is the last chapter of my dissertation in which I argue for the creation of a campaign ethics council. Because of the First Amendment, it is actually difficult to make it illegal to lie in political campaigns, so I argue for a non-statutory means of accountability for politicians when they tell a lie on the campaign trail. I liked writing that one because it mixes discussions of the law, the First Amendment and political philosophy, three of my favorite topics.

Q: For you, what’s the most challenging part about research? What’s the most rewarding?

A: The most challenging part of research for me is doing quantitative work. I’m more of a qualitative scholar, but I’m trying to learn more about quantitative methods. To incorporate that into my work has been a challenge, but I have enjoyed it.

Q: What do you consider to be your greatest accomplishment as an educator or a researcher?
A: I think my greatest accomplishment has just been the amount of work I’ve gotten done over the last five years. I have been teaching four courses every semester and doing my doctoral work and I have somehow managed to get five publications and numerous conference presentations done at the same time. Just managing the fact that I’m being pulled in multiple directions is an accomplishment.

Q: You are the proud parent of two young children. What do you enjoy most about being a parent?

A: My favorite part of parenting, at least at this stage, is just having fun with my kids. I love walking to the park or going out in the yard and playing ball with the kids. I just enjoy being around them, spending time with them, talking to them. I look forward to sitting around the dinner table at the end of the day and hearing about what they did in school.

Q: Is it difficult balancing parenthood and teaching?

A: It can difficult because work always comes home with me. I always have papers to grade, a paper to write or lecture notes to work on, so it can be difficult to pull myself away from my desk and just be present. I have learned to turn the computer off when it is time to be with the kids and to concentrate on my work when the kids are in bed.

Q: What is your favorite thing to do outside of class?

A: Other than just spending time with the kids, my favorite thing to do is watch baseball. I’m a big Baltimore Orioles fan. I played bass when I was younger, so I intend to pick that up again after I’m done with my dissertation. I like just sitting down and watching a movie or TV with my wife. I’m also an avid bicyclist, although I haven’t had much time for that this semester.

Q: What are your favorite television shows, movies and books?

A: Right now my favorite shows are “Breaking Bad,” “The Walking Dead” and “Game of Thrones.” I also like the Walking Dead comic book. I still read a few comic books occasionally. I’ve been enjoying “Saga,” “Nowhere Men” and “Revival.” Most of the real reading I do is political philosophy and media studies.